IN THE CLAIMS

1. (Currently amended) A system for dynamic sampling comprising: an input receiving an analog video signal; and a sampling mechanism coupled to the input and sampling the analog video signal utilizing a variable sampling rate modulated for segments of the analog video signal based upon spatial frequencies within the image content contained within the analog video signal; an output of said sampling mechanism being coupled to a signal analysis unit to determine a highest spatial frequency within the image content; and said variable sampling rate being ~~selectable~~ adjustable both upward and downward over a continuous range as a function of the highest spatial frequency within the image content.

2. (Previously presented) The system as set forth in claim 1 wherein a first sampling rate is employed for a first segment of the analog video signal containing content having a first highest spatial frequency and a second sampling rate greater than the first sampling rate is employed for a segment of the analog video signal containing content having a second highest spatial frequency greater than the first highest spatial frequency.

3. (Previously presented) The system as set forth in claim 2 wherein the sampling mechanism further comprises: a plurality of analog filters each receiving the analog video signal; a plurality of analog-to-digital converters each coupled to one of the plurality of analog filters and having settings based upon the corresponding analog filter, each analog-to-digital converter sampling an output of the corresponding analog filter; and combination logic selecting the output of one of the analog-to-digital converters for each

segment of the analog video signal and combining the selected outputs.

4. (Previously presented) The system as set forth in claim 2 wherein the sampling mechanism further comprises: a single analog-to-digital converter receiving the analog video signal and sampling the analog video signal at a fixed rate; a signal analysis unit analyzing samples from the converter to select a sampling rate for each segment of the analog video signal; and a downsampling unit retaining samples from the converter for each segment of the analog video signal based upon the corresponding sampling rate selected by the signal analysis unit.

5. (Previously presented) The system as set forth in claim 2 wherein the sampling mechanism further comprises: a first analog-to-digital converter receiving the analog video signal and sampling the analog video signal at a fixed rate sufficient to detect all spatial frequencies of interest within the content contained within the analog video signal; a second analog-to-digital converter receiving the analog video signal and sampling the analog video signal at a variable rate; and a signal analysis unit analyzing samples from the first converter to select a sampling rate for each segment of the analog video signal and adjusting the sampling rate of the second converter.

6. (Previously presented) The system as set forth in claim 2 wherein the sampling rate for each segment of the analog video signal is at least twice a highest spatial frequency within content contained by the corresponding segment of the analog video signal.

7. (Previously presented) The system as set forth in claim 2 wherein the sampling mechanism samples the analog video signal at a first rate and transmits samples for at least one segment of the analog video signal at second rate different than the first rate.

8. (Currently amended) A video receiver comprising: an input receiving an analog video signal; an output transmitting a digital video signal to a display, a storage system, or another device; and a sampling mechanism coupled to the input and sampling the analog video signal utilizing a variable sampling rate modulated for segments of the analog video signal based upon spatial frequencies within the image content contained within the analog video signal; an output of said sampling mechanism being coupled to a signal analysis unit to determine a highest spatial frequency within the image content; and said variable sampling rate being adjustable both upward and downward ~~selectable~~ over a continuous range as a function of the highest spatial frequency within the image content.

9. (Previously presented) The video receiver as set forth in claim 8 wherein a first sampling rate is employed for a first segment of the analog video signal containing content having a first highest spatial frequency and a second sampling rate greater than the first sampling rate is employed for a segment of the analog video signal containing content having a second highest spatial frequency greater than the first highest spatial frequency.

10. (Previously presented) The video receiver as set forth in claim 9 wherein the sampling mechanism further comprises: a plurality of analog filters each receiving the

analog video signal; a plurality of analog-to-digital converters each coupled to one of the plurality of analog filters and having settings based upon the corresponding analog filter, each analog-to-digital converter sampling an output of the corresponding analog filter; and combination logic selecting the output of one of the analog-to-digital converters for each segment of the analog video signal and combining the selected outputs.

11. (Previously presented) The video receiver as set forth in claim 9 wherein the sampling mechanism further comprises: a single analog-to-digital converter receiving the analog video signal and sampling the analog video signal at a fixed rate; a signal analysis unit analyzing samples from the converter to select a sampling rate for each segment of the analog video signal; and a downsampling unit retaining samples from the converter for each segment of the analog video signal based upon the corresponding sampling rate selected by the signal analysis unit.

12. (Previously presented) The video receiver as set forth in claim 9 wherein the sampling mechanism further comprises: a first analog-to-digital converter receiving the analog video signal and sampling the analog video signal at a fixed rate sufficient to detect all spatial frequencies of interest within the content contained within the analog video signal; a second analog-to-digital converter receiving the analog video signal and sampling the analog video signal at a variable rate; and a signal analysis unit analyzing samples from the first converter to select a sampling rate for each segment of the analog video signal and adjusting the sampling rate of the second converter.

13. (Previously presented) The video receiver as set forth in claim 9 wherein the sampling rate for each segment of the analog video signal is at least twice a highest spatial frequency within content contained by the corresponding segment of the analog video signal.

14. (Previously presented) The video receiver as set forth in claim 9 wherein the sampling mechanism samples the analog video signal at a first rate and transmits samples for at least one segment of the analog video signal at second rate different than the first rate.

15. (Currently amended) A method dynamic sampling comprising: receiving an analog video signal; sampling the analog video signal utilizing a variable sampling rate modulated for segments of the analog video signal based upon spatial frequencies within the image content contained within the analog video signal; determining a highest spatial frequency within the image content; and ~~selecting~~ adjusting the variable sample rate both upward and downward over a continuous range as a function of the highest spatial frequency within the image content.

16. (Previously presented) The method as set forth in claim 15 wherein a first sampling rate is employed for a first segment of the analog video signal containing content having a first highest spatial frequency and a second sampling rate greater than the first sampling rate is employed for a segment of the analog video signal containing content having a second highest spatial frequency greater than the first highest spatial frequency.

17. (Previously presented) The method as set forth in claim 16 further comprising: receiving the analog video signal at each of a plurality of analog filters; sampling an output of each analog filter utilizing an analog-to-digital converter coupled to the corresponding analog filter and having settings based upon the corresponding analog filter; and selecting the output of one of the analog-to-digital converters for each segment of the analog video signal and combining the selected outputs.

18. (Previously presented) The method as set forth in claim 16 further comprising: receiving the analog video signal at a single analog-to-digital converter sampling the analog video signal at a fixed rate; analyzing samples from the converter to select a sampling rate for each segment of the analog video signal; and retaining samples from the converter for each segment of the analog video signal based upon the corresponding selected sampling rate.

19. (Previously presented) The method as set forth in claim 16 further comprising: receiving the analog video signal at a first analog-to-digital converter sampling the analog video signal at a fixed rate sufficient to detect all spatial frequencies of interest within the content contained within the analog video signal; receiving the analog video signal at a second analog-to-digital converter sampling the analog video signal at a variable rate; and analyzing samples from the first converter to select a sampling rate for each segment of the analog video signal and adjusting the sampling rate of the second converter.

17. (Previously presented) The method as set forth in claim 16 further comprising: receiving the analog video signal at each of a plurality of analog filters; sampling an output of each analog filter utilizing an analog-to-digital converter coupled to the corresponding analog filter and having settings based upon the corresponding analog filter; and selecting the output of one of the analog-to-digital converters for each segment of the analog video signal and combining the selected outputs.

18. (Previously presented) The method as set forth in claim 16 further comprising: receiving the analog video signal at a single analog-to-digital converter sampling the analog video signal at a fixed rate; analyzing samples from the converter to select a sampling rate for each segment of the analog video signal; and retaining samples from the converter for each segment of the analog video signal based upon the corresponding selected sampling rate.

19. (Previously presented) The method as set forth in claim 16 further comprising: receiving the analog video signal at a first analog-to-digital converter sampling the analog video signal at a fixed rate sufficient to detect all spatial frequencies of interest within the content contained within the analog video signal; receiving the analog video signal at a second analog-to-digital converter sampling the analog video signal at a variable rate; and analyzing samples from the first converter to select a sampling rate for each segment of the analog video signal and adjusting the sampling rate of the second converter.

20. (Previously presented) The method as set forth in claim 16 wherein the sampling rate for each segment of the analog video signal is at least twice a highest spatial frequency within content contained by the corresponding segment of the analog video signal.